



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 09/980,661 | 10/02/2003 | Thomas W. Schrepfer | 24334-001 | 8751 |
| 30623 7590 06/27/2008 MINTZ, LEVIN, COHN, FERRIS, GLOVSKY AND POPEO, P.C ATTN: PATENT INTAKE CUSTOMER NO. 30623 ONE FINANCIAL CENTER BOSTON, MA 02111 | | | | |
| EXAMINER NASSER, ROBERT L | | | | |
| ART UNIT | | PAPER NUMBER | | |
| 3735 | | | | |
| MAIL DATE | | DELIVERY MODE | | |
| 06/27/2008 | | PAPER | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/980,661

Applicant(s)

SCHREPPER ET AL.

Examiner

ROBERT L. NASSER

Art Unit

3735

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 March 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 11-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9, 11, 12, 16-23 and 27-32 is/are rejected.
- 7) ☒ Claim(s) 13-15 and 24-26 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/C)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Page No(s)/Mail Date _____

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Johnson et al 4020830. Johnson supplies a voltage between two electrodes, a first electrode 40 that is insulated from the specimen by a cover layer 36 and a second electrode in contact with the specimen, and measures an analyte concentration based on the resulting signal produced. The examiner notes that electrode 40 may ultimately be in electrical communication with the specimen via the conductors, by layer 36 still insulates it from the specimen.

Claims 1, 2, 4, 5, 7-9, 10, 16, 19, 21, 23, and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by Newman 4822566. Newman shows a device for measuring analyte levels including a substrate 12, first and second electrodes 10 and 14, covered by an insulating layer 16. A voltage is applied between the two electrodes to produce a field and the resulting effect of the field is measured, by a change in the dielectric constant of the medium and hence a change in capacitance, and hence impedance at the electrode. In other words it is the field reflected from the electrode. With respect to claim 4, there is a reference capacitor that measures and compensates for temperature. The applied voltage is a sine wave. In addition, it is the examiner's position that the second electrode acts as an antenna electrode. Claim 16 is rejected

in that Newman also has the apparatus. The first and second electrodes are on top of the substrate. There are multiple signal paths, one for the measuring capacitor and one for the reference capacitor.

Claims 1-4, 7, 8, 9, 11, 16, 19, are rejected under 35 U.S.C. 102(b) as being anticipated by Johnson et al 4020830. Johnson supplies a voltage between two electrodes, a first electrode 40 that is insulated from the specimen by a cover layer 36 and a second electrode in contact with the specimen, and measures an analyte concentration based on the resulting signal produced. The examiner notes that electrode 40 may ultimately be in electrical communication with the specimen via the conductors, by layer 36 still insulates it from the specimen. Claims 7 and 8 are rejected in that the value depends on the impedance signal reflected from the measuring electrode. The

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6, 12, 17, 18, 20, 22, and 28-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Newman. Claims 6 and 32 are rejected in that the exact driving frequency would have been a mere matter of design choice for one skilled in the art. Claim 12 is rejected in that the examiner takes official notice that in order to function, the changes in impedance of the sensor of Newman must be calibrated to

glucose levels. Claims 17 and 28 are rejected in that Newman discloses in vivo uses. The examiner takes official notice that it is well known to use a strap or other attachment means to hold an in vivo device in place on the body. Claim 20 is rejected in that to provide one elect rode on each side of the substrate or both on the same side would have been a mere matter of design choice for one skilled in the art. Claims 22 and 28-31 are rejected in that the exact size and shape of the electrodes would have been a mere matter of design choice for one skilled in the art.

Claims 13-15 and 24-26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. These claims define over the art in that none of the art uses the device or method as part of a resonant LC circuit, as claimed.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ROBERT L. NASSER whose telephone number is (571)272-4731. The examiner can normally be reached on m-f 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Marmor II can be reached on 571 272-4730. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Robert L. Nasser Jr/
Primary Examiner
Art Unit 3735

RLN
June 23, 2008

